JILL A. HADLEY
jah18@psu.edu

219 BBH
Department of Biobehavioral Health
The Pennsylvania State University
University Park, PA 16802
(814) 867-2817

1375 Linn St
State College, PA 16803
(814) 238-1459

Professional Experience

2017-present Research Technologist for Dr. Hannah Schreier; Department Biobehavioral Health, College of Health and Human Development, The Pennsylvania State University
1998-2017 Research Support Staff, College of Agricultural Sciences,
Research Associate (Research Technologist 4) with Dr. R. Ramachandran and Dr. R. Vasilatos-Younken; Department of Animal Science, The Pennsylvania State University
1991-1998 Research Support (Technician/Technologist) for Dr. K.J. Miller, Department of Food Science; College of Agricultural Sciences, The Pennsylvania State University
1988-1991 Research Staff, Department of Biochemistry and Molecular Biology; Eberly College of Science, The Pennsylvania State University

Education Ursinus College Collegeville, PA
B.S. Biology, 1980

Qualifications/Skills

Design and perform independent experiments. Highly proficient in research methodologies including:
• Protein chemistry, protein purification methods (including His-tag, ion exchange, and gel filtration methods), immunoprecipitation, native and reducing gel electrophoresis, Western blotting analysis, immunohistochemistry, protein assays including RIA and ELISA
• Nucleic acid extraction (RNA and genomic DNA) and purification, gene cloning and bacterial and mammalian expression systems, agarose gel electrophoresis, cDNA preparation, qPCR
• Sterile microbiological techniques, bacterial culture transformation/ transfection, mammalian cell culture methods, including primary culture and cell line development, and BSL 2 experience
• Microscopy, fluorescence microscopy, photomicrography
• Radioactive techniques including iodination of hormones, hormone assays, and glucose uptake
• Animal handling protocols, tissue collection, specimen preparation
• Plant-microbe interaction- soybean cotyledon assays
Some experience with Next Gen Sequencing, HPLC and Mass Spectrometry technologies

Certifications and Professional Development

Radiation Safety, IACUC, Chemical Storage and Waste Management (Chemical Safety), CHIMS (Chemical Inventory Management System), BSL 2, CPT license, Animal Cell Culture Methods and Scale-up Strategies Workshop, Principles and Practice of Protein Purification by Ion-Exchange (Waters Associates) Workshop, Theoretical Introduction to HPLC (Perkin-Elmer) Workshop, Graduate course: 597C Host/Path-Pest Int, PSU (GPA 4.0)

Leadership experience

• Supervised 7 honors and independent study student research projects in the last 10 years
• Trained several (per year) undergraduate students in general laboratory practices and trained graduate students and postdocs in specific protocols and methodologies

• Managed lab operations, including equipment and supplies purchases, monitored budget expenditures, maintained inventories, and was responsible for overseeing lab safety
• Prepared documents: manuscripts, IACUC and Biosafety protocols, Unit Specific Plans and SOPs
• Provided project leadership and coordinated personnel activities
• Served as Poultry Science Department Chemical Safety and CHIMS administrator (2000-2012).

Publications

Hadley JA, Horvat-Gordon M, Kim WK, Praul CA, Burns D, Leach RM Jr. (2016). Bone sialoprotein keratin-sulfate proteoglycan (BSP-KSPG) and FGF-23 are important physiological components of medullary bone. Comp Biochem Physiol Mol Integr Physiol 194:1-7.
Tiwari A, Ocon-Grove OM, **Hadley JA**, Giles JR, Johnson P, Ramachandran R. (2015). Expression of adiponectin and its receptors is altered in epithelial ovarian tumors and ascites-derived ovarian cancer cell lines. Int J Gynecol Cancer 25:399-406.
Tiwari A, **Hadley JA**, Ramachandran R. (2014). Aquaporin 5 expression is altered in ovarian tumors and ascites-derived ovarian tumor cells in the chicken model of ovarian tumor. J Ovarian Res 7:99.
Ramachandran R, Maddineni S, Ocon-Grove O, Hendricks 3rd G, Vasilatos-Younken R, **Hadley JA**. (2013) Expression of adiponectin and its receptors in avian species. Gen Comp Endocrinol 190:88-95.
Tiwari A, **Hadley JA**, Hendricks GL 3rd, Elkin RG, Cooper T, Ramachandran R. (2013). Characterization of ascites-derived ovarian tumor cells from spontaneously occurring ovarian tumors of the chicken: evidence for E-cadherin upregulation. PLoS One 8: e57582. Doi: 10.1371/journal.pone.0057582. Epub 2013 Feb 27.
Krzysik-Walker SM, **Hadley JA**, Pesall JE, McFarland DC, Vasilatos-Younken R, Ramachandran R. (2011). Nampt/visfatin/PBEF Affects Expression of Myogenic Regulatory Factors and is Regulated by Interleukin-6 in Skeletal Muscle Cells. Comp. Biochem Physiol A Mol Integr Physiol 159:423-421.
Hendricks GL 3rd, **Hadley JA**, Krzysik-Walker SM, Prabhu KS, Vasilatos-Younken R, Ramachandran R. (2009). Unique Profile of Chicken Adiponectin, a Predominantly Heavy Weight Multimer, and Relationship to Visceral Adiposity. Endocrinol150:3092-3100.
Zhou Y, Wang X-H, **Hadley J**, Corey SJ, Vasilatos-Younken R. (2005). Regulation of JAK2 protein expression by chronic, pulsatile GH administration *in vivo*: A proposed mechanism for ligand enhancement of signal transduction. Gen Comp Endocrinol 144:128-139.
Farhat, A, Edwards ME, Costell MH, **Hadley JA**, Walker PN, Vasilatos-Younken R, (2002). A low residue nutritive supplement as an alternative to feed withdrawal in broilers: efficacy for gastrointestinal tract emptying and maintenance of live weight prior to slaughter. Poultry Science 81: 1406-1414.
Farhat, A, Maddox CW, Edwards ME, Costell MH, **Hadley JA**, Vasilatos-Younken R, (2002). Oral lavage with polyethylene glycol reduces microbial colonization in the gastrointestinal tract of broilers. Poultry Science 81:585-589.
Wang P, Ingram-Smith C, **Hadley JA**, Miller KJ, (1999). Cloning, sequencing, and characterization of the *cgm*A gene of *Sinorhizobium meliloti* involved in cyclic beta-glucan biosynthesis. J Bacteriol 181**:** 4576-4583.
Breedveld, MW, **Hadley JA**, Miller KJ. (1995). A novel cyclic beta-1,2-glucan mutant of *Rhizobium meliloti*. J Bacteriol 177**:**6346-6351.
Miller KJ, **Hadley JA**, Gustine DL. (1994). Cyclic beta-(1,6)(1,3)-glucans of *Bradyrhizobium japonicum* USDA 110 elicit isoflavonoid production in the soybean (*Glycine max*) host. J Bacteriol 104**:**917-923.
Hadley J, Gustine DL, Miller KJ. (1993). Cyclic beta-(1,6)(1,3)-glucans *of Bradyrhizobium japonicum*Jill elicit isoflavonoid biosynthesis in *Glycine max* cotyledon. In "Plant signals in interaction with other organisms", in Current Topics in Plant Physiology: An American Society of Plant Physiologists Series (Jack A. Schultz and I. Raskin, eds.), vol. 11, Rockville, Md.
Hadley JA, Hall JC, O'Brien A, Ball R. (1992). Effects of a simulated microgravity model on cell structure and function in rat testis and epididymis. J Appl Physiol 72**:**748-759.

Hall, JC, **Hadley J**, Doman T. (1991). Correlation between changes in rat sperm membrane lipids, protein, and the membrane physical state during epididymal maturation. J Androl 12**:**76-87.
Hall JC, **Hadley JA**. (1990). Kinetics of receptor-mediated binding of a 32K epididymal glycoprotein to surface of testicular sperm in rats. Mol Androl 1**:**232-240.

Conference Presentations

Breedveld, MW, **Hadley JA***, Miller KJ. "A Novel Cyclic beta-(1,2)-Glucan Mutant of *Rhizobium meliloti*" presented at the American Society of Microbiologists General Meeting (poster session), May 1995.
Hadley J*, Gustine DL, Miller KJ. "Cyclic beta-(1,6)(1,3)-Glucans of *Bradyrhizobium japonicum* Elicit Flavonoid Biosynthesis in *Glycine max* cotyledon" presented at Microbiologists at Penn State (MAPS) meeting June, 1993, and at a regional Plant Physiology Symposium (poster session), May 1993.

Patent

Ramachandran R, Hadley JA. "Dietary Supplement Boosts Egg Production in Broiler Breeder Hens". Technology disclosure filed with the Office of Technology Management (University Park), 10-15-2014.

Committee and Professional Memberships, and Service Activities

Center for Reproductive Biology and Health member (current), Green Team Committee participant (2011), Biosafety Committee (charged with re-writing Biosafety Policy SY24, 2009-2010), AG Progress Days Poultry Booth Attendant, Departmental CHIMS Administrator, Departmental Chemical Safety and Waste Administrator, Departmental Search Committees (2001, 2009, 2010), PA Governor's School TA, Student Mentor and Project Advisor (Undergraduate Honors and Independent Study Projects), MAPS (Microbiologists at Penn State), American Society for Microbiology and Allegheny Branch of ASM, American Society of Plant Physiologists, Minority High School Student Summer Research Project Supervisor, Penn State Women's Gymnastics Volunteer Floor Official